

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A color correcting relation extracting method comprising:

an image data obtaining step of obtaining image data outputted from an input device for receiving an original image and outputting the image data representative of a received image which is subjected to a color correction for the original image;

a first conversion step of converting the image data obtained by said image data obtaining step into coordinate values of a colorimetry color space describing a measured value of a color, corresponding to a color of an image obtained when the image based on the obtained image data is outputted from an output device for outputting the image based on the image data, in accordance with characteristics of an image output of the output device; and

coordinates obtaining step for obtaining the coordinate values of the colorimetry color space corresponding to the color of the original image, said coordinates obtaining step being not restricted in sequence of the step to be executed,

whereby an association between colors before and after the color correction is extracted.

2. (original): A color correcting relation extracting method according to claim 1, wherein said coordinates obtaining step includes a characteristic obtaining step of obtaining a characteristic value capable of being converted into the coordinate values of the colorimetry color space, corresponding to a color of the original image, and a second conversion step of

converting the characteristic value obtained by the characteristic value obtaining step into the coordinate values of the colorimetry color space.

3. (original): A color correction method comprising:

a color correction conversion definition producing step including a first partial step of obtaining image data outputted from an input device for receiving an original image and outputting the image data representative of a received image which is subjected to a color correction for the original image, a second partial conversion step of converting the image data obtained by said first partial step into coordinate values of a colorimetry color space describing a measured value of a color, corresponding to a color of an image obtained when the image based on the obtained image data is outputted from an output device for outputting the image based on the image data, in accordance with characteristics of an image output of the output device, and a third partial step for obtaining the coordinate values of the colorimetry color space corresponding to the color of the original image,

whereby said color correction conversion definition producing step produces a color correction conversion definition defining an association between coordinate values of the colorimetry color space corresponding to colors before and after the color correction;

a first device conversion step of using a conversion definition according to characteristics of image receipt or image output by a first device for receiving an image to obtain image data or outputting an image based on image data, to convert coordinate values in a first color space describing image data for the first device into coordinate values of the colorimetry color space independent of the device;

a color correction conversion step of using the color correction conversion definition produced in said color correction conversion definition producing step to convert coordinate values of the colorimetry color space corresponding to colors before the color correction into coordinate values of the colorimetry color space corresponding to colors after the color correction; and

a second device conversion step of using a conversion definition according to characteristics of image receipt or image output by a second device for receiving an image to obtain image data or outputting an image based on image data, to convert coordinate values of the colorimetry color space into coordinate values in a second color space describing image data for the second device,

whereby the image data defined by the first color space is converted into image data defined by the second color space, said image data being representative of an image in which the color correction is applied to an image based on the image data defined by the first color space.

4. (original): A color correction method according to claim 3 wherein said color correction conversion definition producing step produces, as said color correction conversion definition, a color correction conversion definition defining an association between coordinate values within an area of original image colors reproducible as colors of the original image of the colorimetry color space and coordinate values within an area of reproduced image colors reproducible as colors of the reproduced image of the colorimetry color space,

before execution of the color correction conversion step, there is carried out a first gamut conversion step in which coordinate values within an area of colors reproducible as colors of an

image received or outputted by the first device of the colorimetry color space are converted into coordinate values within the area of the original image colors, and

after execution of the color correction conversion step, there is carried out a second gamut conversion step in which coordinate values within the area of the reproduced image colors are converted into coordinate values within an area of colors reproducible as colors of an image received or outputted by the second device of the colorimetry color space.

5. (original): A color correction method according to claim 3, wherein said color correction conversion definition producing step produces, as said color correction conversion definition, a color correction conversion definition defining an association between coordinate values within a predetermined area of the colorimetry color space,

before execution of the color correction conversion step, there is carried out a first gamut conversion step in which coordinate values within an area of color reproducible as colors of an image received or outputted by the first device of the colorimetry color space are converted into the coordinate values within the predetermined area, and

after execution of the color correction conversion step, there is carried out a second gamut conversion step in which the coordinate values within predetermined area are converted into coordinate values within an area of colors reproducible as colors of an image received or outputted by the second device of the colorimetry color space.

6. (new): The color correcting relation extracting method of claim 1, further comprising:
producing a color correction conversion definition defining an association between
coordinate values of the colorimetry color space corresponding to colors before and after the
color correction.

7. (new): The color correcting relation extracting method of claim 6, further comprising:
using the color correction conversion definition to convert coordinate values of the
colorimetry color space corresponding to colors before the color correction into coordinate
values of the colorimetry color space corresponding to colors after the color correction.

8. (new): The color correcting relation extracting method of claim 1, further comprising:
using a color correction conversion definition defining an association between coordinate
values of the colorimetry color space corresponding to colors before and after the color
correction, to convert coordinate values of the colorimetry color space corresponding to colors
before the color correction into coordinate values of the colorimetry color space corresponding to
colors after the color correction.

9. (new): A color correcting relation extracting method, comprising:
measuring a color of a patch of a color chart to obtain a colorimetry value;
photographing the color chart to obtain RGB data; and

combining a know-how for converting the colorimetry value into the RGB data, with a monitor characteristic conversion for converting the RGB data into the colorimetry value of a color of an image on a monitor;

wherein know-how for a preferable image formation is obtained.

10. (new): The color correcting relation extracting method according to claim 2, wherein the colorimetry color space comprises a device-independent color space.